

The same author (Jour. Exp. Zool., Aug., 1913) discusses in a much more extended way the many interesting questions of heredity suggested in the more general article.

PERSISTENCE OF BACILLUS ABORTIVUS IN TISSUES.

Fabyan (Jour. Med. Research, May, 1913) presents facts to show that *B. abortivus* has a quite prolonged life in the tissues of apparently healthy laboratory animals—as guinea pig, rabbit, mouse, rat, pigeon, etc. In one instance they were harbored without any external signs of ill effects for 67 weeks. Two additional conclusions seem warranted from the experiments: First, that there seems to be at least a slight temporary multiplication of the germs after inoculation; and, second, that the animals are not without the power slowly to destroy the bacilli.

The study is interesting as bearing on possible periods of endurance and latency of pathogenic bacteria after the disappearance of the symptoms of the disease.

PERSISTENCE OF TUBERCLE BACILLI IN CULTURES

Smith (Jour. Med. Res., May, 1913) tests the current view that tubercle bacilli lose their vitality in cultures in periods of 1 to 6 months. He found that cultures which completely ceased to multiply on the artificial media under wholly favorable conditions were still infectious to guinea-pigs for from 7-19 months. This was true both of human and bovine strains; though of the two types when reared side by side the bovine is the more resistant. It is true that the number of bacilli surviving in such cultures is very small. The series of biological facts is suggestive: Tubercle bacilli (bovine), which on removal from the diseased animal do not at first multiply on glycerine agar, may in time become partially saprophytized and grow luxuriantly on such culture media; gradually this culture medium fails to serve their purpose, and most of them die; as long as vitality lasts the fresh tissues of the guinea-pig furnish an adequate medium for their restoration.

CAMBIUM GROWTH IN AMERICAN LARCH

Knudson (Bul. Tor. Bot. Club, June, 1913) presents a study of the American larch in respect to place and time of beginning of